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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Mahesh Chellappa

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EXAMINER

SHAND, ROBERTA A

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/646,452	<b>Applicant(s)</b> CHELLAPPA ET AL.	
	<b>Examiner</b> Roberta A. Shand	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-15,26-28 and 30-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-15, 26-28 and 30-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-7, 9-17, 26-28, 30-33, 36 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dykeman (U.S. 7177951 B1) in view of Rajsic (U.S. 7283467 B2).

3. Regarding claim 1, Dykeman teaches (fig.4) a method for crankback handling in a multi-peer group network, comprising: receiving a first connection request from a node of a first peer group (col. 10, line 39 – 47); detecting a call failure occurring inside a second different peer group between nodes within a second peer group (col. 10, lines 48-50); transmitting a crankback from the second peer group to the first peer group (col. 10, lines 50=59), wherein the crankback specifies a blocked interface (Node AA Blocked) at a first link between the first peer group and the second peer group, the crankback transmitted from a node of the second peer group; and receiving a second connection request from the node of the first peer group, the second connection request using a second link to the second peer group that avoids the call failure (col. 10, line 60 – col. 11, line 4).

4. Dykeman does not teach transmitting a succeeding end crankback rather than a next higher level crankback specifying a block at a first link located outside the first and second peer groups and transmitting is based at least in part on the determination of whether multiple nodes in the succeeding peer group have connectivity to the preceding peer group or whether multiple

Art Unit: 2616

nodes of the preceding peer group have connectivity to the first node of the succeeding peer group or combinations thereof

5. Rajsic teaches (fig. 3 and col. 4, line 55 – col. 5, line 67) transmitting a succeeding end crankback rather than a next higher level crankback specifying a block at a first link located outside the first and second peer groups and transmitting is based at least in part on the determination of whether multiple nodes in the succeeding peer group have connectivity to the preceding peer group or whether multiple nodes of the preceding peer group have connectivity to the first node of the succeeding peer group or combinations thereof (Rajsic teaches checking for alternative paths before using crankback (col. 4, line 55 – col. 5, line 23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dykeman to include Rajsic's crankback method because the SEB crankback generated by the entry border node will allow the exit border node of the preceding peer group, after following the prior art PNNI crankback procedures, to try other parallel trunk groups entering the destination peer group that may lead to other entry border nodes and more alternate paths.

6. Regarding claim 10, Dykeman teaches (fig.5) the first peer group is a preceding peer group and the second peer group is a succeeding peer group.

7. Regarding claims 3 and 11, Dykeman teaches (fig.5) the node of the second peer group is an entry border node configured to receive connection requests for the second peer group.

Art Unit: 2616

8. Regarding claims 4 and 12, Dykeman teaches (col. 10, lines 50-59) the blocked interface is specified between an originating node in the first peer group and an entry border node in the second peer group.

9. Regarding claims 5 and 13, Dykeman teaches (col. 10, lines 50-59) the blocked interface causes the originating node to use an alternate exit border node within the first peer group to implement the second link to the second peer group.

10. Regarding claims 6 and 14, Dykeman teaches (abstract and col. 1, lines 13-29) the network is an ATM network.

11. Regarding claims 7, 15 and 31, Dykeman teaches (col. 10, lines 30-34) the node of the second peer group is configured to use a DTL to discover the first connection request was transmitted from the first peer group.

12. Regarding claim 9, Dykeman teaches (fig.4) a packet switch for crankback handling in a multi-peer group network comprising: means for receiving a first connection request from a node of a first peer group (col. 10, lines 39-47); means for detecting a call failure within a second peer group (col. 10, lines 48-50); means for transmitting a crankback from the second peer group to the first peer group (col. 10, lines 50-59), wherein the crankback specifies a blocked interface (Node AA Blocked) at a first link between the first peer group and the second peer group, the crankback causing a second connection request from the node of the first peer group, the second

Art Unit: 2616

connection request using a second link to the second peer group that avoids the call failure (col. 11, line 60 – col. 11, line 5).

13. Dykeman does not teach transmitting a succeeding end crankback rather than a next higher level crankback specifying a block at a first link located outside the first and second peer groups and transmitting is based at least in part on the determination of whether multiple nodes in the succeeding peer group have connectivity to the preceding peer group or whether multiple nodes of the preceding peer group have connectivity to the first node of the succeeding peer group or combinations thereof

14. Rajsic teaches (fig. 3 and col. 4, line 55 – col. 5, line 67) transmitting a succeeding end crankback rather than a next higher level crankback specifying a block at a first link located outside the first and second peer groups and transmitting is based at least in part on the determination of whether multiple nodes in the succeeding peer group have connectivity to the preceding peer group or whether multiple nodes of the preceding peer group have connectivity to the first node of the succeeding peer group or combinations thereof (Rajsic teaches checking for alternative paths before using crankback (col. 4, line 55 – col. 5, line 23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dykemanto include Rajsic's crankback method because the SEB crankback generated by the entry border node will allow the exit border node of the preceding peer group, after following the prior art PNNI crankback procedures, to try other parallel trunk groups entering the destination peer group that may lead to other entry border nodes and more alternate paths.

Art Unit: 2616

15. Regarding claim 26, Dykeman teaches (fig.4) a switch in a multi-peer group network operable to: receive a first connection request from a node of a preceding peer group on a first link (col. 10, line 39 - 47); detect a call failure inside a succeeding peer group (col. 10, lines 48-50); identify a second link between the preceding peer group and the succeeding peer group(col. 10, lines 50-59); and transmit a crankback (col. 10, lines 50-59), wherein crankback specifies the first link as blocked (Node AA Blocked) at a succeeding end and wherein the crankback causes a second connection request from a node of the preceding peer group, the second connection request using the second link to the succeeding peer group that avoids the call failure (col. 11, line 60 – col. 11, line 5).

16. Dykeman does not teach transmitting a succeeding end crankback rather than a next higher level crankback specifying a block at a first link located outside the first and second peer groups and transmitting is based at least in part on the determination of whether multiple nodes in the succeeding peer group have connectivity to the preceding peer group or whether multiple nodes of the preceding peer group have connectivity to the first node of the succeeding peer group or combinations thereof

17. Rajsic teaches (fig. 3 and col. 4, line 55 – col. 5, line 67) transmitting a succeeding end crankback rather than a next higher level crankback specifying a block at a first link located outside the first and second peer groups and transmitting is based at least in part on the determination of whether multiple nodes in the succeeding peer group have connectivity to the preceding peer group or whether multiple nodes of the preceding peer group have connectivity to the first node of the succeeding peer group or combinations thereof (Rajsic teaches checking for alternative paths before using crankback (col. 4, line 55 – col. 5, line 23). It would have been

Art Unit: 2616

obvious to one of ordinary skill in the art at the time the invention was made to modify Dykemanto include Rajsic's crankback method because the SEB crankback generated by the entry border node will allow the exit border node of the preceding peer group, after following the prior art PNNI crankback procedures, to try other parallel trunk groups entering the destination peer group that may lead to other entry border nodes and more alternate paths.

18. Regarding claims 27 and 40, Rajsic teaches (fig. 3 and col. 4, line 55 – col. 5, line 67) the crankback is a succeeding end crankback and wherein the succeeding end crankback is transmitted rather than a next higher level crankback.

19. Regarding claim 28, Dykeman teaches (col. 10, lines 50-59) the first link is specified between an originating node in the preceding peer group and the switch in the succeeding peer group.

20. Regarding claim 30, Dykeman teaches (abstract and col. 1, lines 13-29) wherein the switch comprises an ATM switch.

21. Regarding claim 33, Dykeman teaches (col. 10, lines 30-34) transmitting a list to a node in the preceding peer group, the list specifying nodes in the preceding peer group that have connectivity with the switch, wherein the node uses the list to ensure the second link avoids the call failure.



Art Unit: 2616

22. Regarding claims 36 and 39, Dykeman teaches (fig.4) a switch in a multi-peer group network operable to: send a first connection request from a preceding peer group on a first link (col. 10, line 39 – 47); receive a crankback from the succeeding peer group (col. 10, lines 50-59), wherein the crankback specifies the first link as blocked (Node AA Blocked) at a succeeding end if there is a call failure inside the succeeding peer group; and a list specifying nodes in the preceding peer group that have connectivity with the succeeding peer group (col. 10, lines 60-67); and select an alternate switch of the preceding peer group based at least in part on the list (col. 10, lines 60-67); and forward the crankback to the alternate switch wherein the alternate switch is operable to send a second connection request to a node of the succeeding peer group, the second connection request using a second link to the succeeding peer group that avoids the call failure. (col. 11, line 60 – col. 11, line 5).

23. Dykeman does not teach transmitting a succeeding end crankback rather than a next higher level crankback specifying a block at a first link located outside the first and second peer groups and transmitting is based at least in part on the determination of whether multiple nodes in the succeeding peer group have connectivity to the preceding peer group or whether multiple nodes of the preceding peer group have connectivity to the first node of the succeeding peer group or combinations thereof

24. Rajsic teaches (fig. 3 and col. 4, line 55 – col. 5, line 67) transmitting a succeeding end crankback rather than a next higher level crankback specifying a block at a first link located outside the first and second peer groups and transmitting is based at least in part on the determination of whether multiple nodes in the succeeding peer group have connectivity to the preceding peer group or whether multiple nodes of the preceding peer group have connectivity to

Art Unit: 2616

the first node of the succeeding peer group or combinations thereof (Rajsic teaches checking for alternative paths before using crankback (col. 4, line 55 – col. 5, line 23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dykemanto include Rajsic's crankback method because the SEB crankback generated by the entry border node will allow the exit border node of the preceding peer group, after following the prior art PNNI crankback procedures, to try other parallel trunk groups entering the destination peer group that may lead to other entry border nodes and more alternate paths.

25. Regarding claim 41, Rajsic teaches (fig. 3 and col. 4, line 55 – col. 5, line 67) the circuitry is further configured to: determine whether the detected call disruption is caused by a local communication failure on one of the intra group links or on one of the peer switches; if the detected call disruption is caused by a local communication failure, determine whether the local communication failure can be routed around by routing the call over the different inter group link; if the detected call disruption is caused by a local communication failure, and if the call can be rerouted using the different inter group link, send the second type of crankback message to indicate an inter group link failure and cause rerouting over different the different inter group link; and otherwise, send the first type of crankback message if the second type of crankback message is not sent (Rajsic teaches checking for alternative paths before using crankback (col. 4, line 55 – col. 5, line 23).

Art Unit: 2616

26. Claim 8, 34, 35, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dykeman (U.S. 7177951 B1) in view of Rajsic (U.S. 7283467 B2) and further in view of Kumar (U.S. 7085279 B1).

27. As mentioned above, Dykeman and Rasjic do not teach GAT IE.

28. Kumar teaches (col. 6, lines 31-56) GAT IE It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dykeman and Rasjic to include Kumar's GAT IE as Gat IE is a well known standard for carrying data to the endpoint.

### ***Response to Arguments***

29. Applicant's arguments with respect to claims 1-17 and 26-38 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A. Shand whose telephone number is 571-272-3161.

The examiner can normally be reached on M-F 9:00am-5:30pm.

31. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on 571-272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-83003

Art Unit: 2616

32. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Roberta A. Shand  
/R. A. S./  
Examiner, Art Unit 2616

/FIRMIN BACKER/  
Supervisory Patent Examiner, Art Unit 2616